

A NEW COMBINATION IN THE GENUS SCHLEINITZIA (LEGUMINOSÆ-MIMOSOIDEÆ)

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ABSTRACT: The species *Albizia megaladenia* Merr. is referred to the Pacific genus *Schleinitzia*. A pollen and morphological description is given for the species.

RÉSUMÉ : L'étude des caractères polliniques et morphologiques de l'espèce *Albizia megaladenia* Merr. conduit à la transférer dans le genre *Schleinitzia*.

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Much attention has recently been paid to the genus *Schleinitzia* (see VERDCOURT, 1977 and NEVLING & NIEZGODA, 1978), a small genus whose geographic area is entirely Pacific, comprising until now three species:

- *S. insularum* (Guill.) Burkart (= *Leucæna forsteri* Benth.);
- *S. novo-guineensis* (Warburg) Verdcourt (= *Prosopis insularum* (Guill.) Breteler subsp. *novo-guineensis* (Warburg) Breteler);
- *S. fosbergii* Nevling & Niezgoda (= *Leucæna insularum* (Guill.) Däniker var. *guamensis* Fosberg).

During work on Malesian and Pacific *Leguminosæ*, we came upon specimens of *Albizia megaladenia* Merrill, which prove to belong to that genus.

POLLEN DESCRIPTION

Large asymmetrical polyad, $145 \times 92 \times 92 \mu\text{m}$, formed by the very loose association of 20 cells (five associated tetrads). Individual cells all alike and heteropolar, distinctly areolate on their distal parts, more or less scabrous on lateral and proximal sides. Exine ornamentation (in distal parts): large areoles, more or less rounded, the more often isodiametric but sometimes elongated in surface view. Exine structure: columellar. Apertures: circular spores ($4 \mu\text{m}$ in diameter) surrounded by distinct costæ, either irregularly faced or faced by twos.

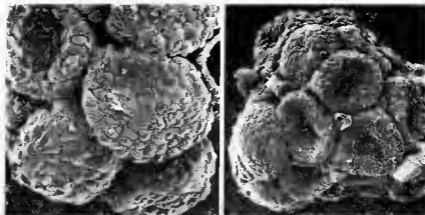


Fig. 1. — Scanning Electron Micrographs of *Schleinitzia megaladenia* : a, $\times 780$; b, $\times 1600$. (Ramos & Edaño in Bur. of Sci. 46708, US).

AFFINITIES

Schleinitzia megaladenia shows clear pollen affinities with the other species of the genus, but appear a very distinct species, particularly on account of its apertural type: the pollen of this species is porate contrary to the others (all colporate). The polyad is formed by a very loose association of five tetrads, showing a tendency to remain permanently united. In the other species, the polyads are commonly broken up in permanent tetrads.

The exine ornamentation is similar to those described for *S. insularum* and *S. fosbergii*.

Schleinitzia megaladenia (Merrill) Guinet & Nielsen, *comb. nov.*

— *Albizia megaladenia* MERRILL, Philipp. J. Sci., ser. C, 13 : 16 (1918); En. Philipp. 2 : 247 (1923).

TYPE : Ramos & Edaño in Bur. Sci. 29023, Philippines, Luzon, Tayabas Province, Umiray (holo-, US; iso-, NY).

Small tree up to 8 m high; branchlets terete, glabrous; stipules ca. 1 mm long, deltoid, acute, hard and persistent. Leaves: rachis 8-14 cm, puberulous; petiole 2.5-3.5 cm; glands ca. 1 mm below the proximal hair of pinnæ and at all or absent from the three proximal pairs of pinnæ; lower gland up to 9 mm long, and 5 mm high, crater-shaped, hollow; distal glands 1.5-3.5 mm in diam., 2-4 mm high, narrowly urceolate, hollow; pinnæ 5-9 pairs, opposite or nearly so, 5-15 cm, puberulous on the upper side, glandless; leaflets (13-)20-31 pairs per pinna, opposite, sessile, chartaceous, (3-)7-15 \times 1.5-4 mm, asymmetrically oblong, glabrous on both

surfaces, margin ciliate, base asymmetrically cunate/truncate, apex rounded; main vein closer to but not parallel to the upper margin 1(-2) accessory veins are ascending from the base arching towards the lower margin.

Inflorescence: peduncles racemously arranged in terminal racemes; raceme ca. 16-25 cm long, faintly adpressedly puberulous, peduncles 15-17 cm long when flowering, up to 6 together in clusters, the outer of lower ones first flowering, subtended by small deltoid acute, ca. 1 mm long, persistent bracts, and bearing a ring of ovate sessile bracts ca. 0.5 mm, just below the head. Heads of ca. 40 flowers, each flower subtended by a 1-1.5 mm long, spatulate bract. Flowers shortly pedicellate, pedicel ca. 0.2 mm long, calyx 1.5 mm, gamosepalous, funnel-shaped, glabrous, teeth ca. 0.2 mm, broadly deltoid of somewhat unequal size, obtuse, petals 5, free ca. 2 mm long, oblanceolate, acute, glabrous, stamens 10, free to the base, filaments ca. 4.5 mm, anthers ca. 0.2 mm dorsifixed with a small subsessile to stipitate, caducous, glabrous gland at the apex (gland ca. 0.05 mm in diameter); ovary subsessile, ca. 1.3 mm, glabrous, stipe 0.5 mm; style ca. 3.5 mm, stigma projecting beyond the stamens, slightly widened and concave.

Pods up to 6 together developed from the same head, stalked, stalk up to 1 cm long; pod up to 8.6×1.6 cm, oblong, with parallel margins; valves chartaceous, reticulate veined, apparently indehiscent, glabrous; seeds up to ca. 20 per pod. Seed: ca. 4.2×2.5 mm, obovate-elliptical, flat; areole 2.8×1.3 mm, pleurogram parallel to the margin and open towards the micropyle.

MATERIAL STUDIED: PHILIPPINES: *Ramos & Edaño in Bur. of Sci.* 29023, Luzon, Tayabas Province, Umiray, NY, US; 46708, Isabela Province, San Mariano, NY, US.

LITERATURE

- NEVLING, L. I. & NIEZGODA, CH. N., 1978. — On the genus *Schleinitzia* (Leguminosae-Mimosoideae), *Adansonia*, ser. 2, 18 (3) : 345-363.
VERDCOURT, B., 1977. — New taxa of Leguminosae from New Guinea, *Kew Bull.* 32 : 225-251.